U.S. Patent Appn. Serial No. 10/008,955
Substitute Specification (Clean Copy) Dated October 28, 2010
Submitted In Conjunction with
Statement of Hans Klingemann, M.D., Ph.D. Regarding Biological Deposits In
Accordance With 37 C.F.R. § 8 1.801-1.809

ABSTRACT

This invention relates to a natural killer cell line termed NK-92 and to NK-92 cell lines that have been modified by transfection with a vector to confer advantageous properties. Additionally, the invention provides an NK-92 cell, an NK-92 cell modified by transfection with a vector conferring advantageous properties, which is unable to proliferate and which preserves the effective cytotoxic activity. The invention provides a modified NK-92 cell line that is transfected with a vector encoding a cytokine that promotes the growth of NK-92 cells. In a significant embodiment, the cytokine is interleukin 2. The invention additionally provides a modified NK-92 cell line that is transfected with a vector that expresses a thymidine kinase gene. The

2. The invention additionally provides a modified NK-92 cell line that is transfected with a vector that expresses a thymidine kinase gene. The invention further provides a modified NK-92 cell line that is transfected with a vector that expresses a β_2 micrglobulin that has lost the ability to bind to T-cell receptors.